
CONCEVEIBA AUBLET (EUPHORBIACEAE) NEW TO AFRICA

The flora of tropical Africa is fairly well known, and in most areas botanical exploration produces few surprises. One exception is the Atlantic coastal forest of southern Cameroon and western Gabon, which is very rich in species and continues to yield new finds. The flora of this part of Africa has many links with that of South America; a common pattern is for a predominantly neotropical taxon (family, subfamily, tribe, or genus) to have a few representatives in central Africa (Thorne, 1973).

This paper describes an African addition to *Conceveiba* Aublet, a small neotropical genus of about nine species with its center of diversity in the Guianas (Jablonski, 1967). The African species is known only from mature forest in the Lopé Reserve in the Ogooué valley of central Gabon. The specimens were collected by J. M. and B. Reitsma from marked trees during a forest plot enumeration for the New York Botanical Garden.

The genus *Conceveiba* has been broadly defined by Jablonski (1967) to include two segregate genera, *Conceveibastrum* Pax & K. Hoffm. and *Veconcibeia* Pax & K. Hoffm. He characterized the genus as having a trimerous ovary with three short styles, shortly connate at the base. The male flowers have numerous stamens, all fertile or with an inner ring of long, plicate staminodes.

The leaves, leaf arrangement, pistillate flowers, male inflorescence, male calyx, and individual stamens are all typical of the genus. Differences include the fruits, which are slightly lobed instead of trigonous or cylindrical, and the inflorescences, which are arranged monoeciously, while the rest of the genus is reportedly dioecious. *Conceveiba africana* also has distinctive male flowers. The number of stamens (7–10) is low for the genus, and the lack of an inner ring of staminodes distinguishes it from *Conceveiba* s. str. The presence of a pistillode in the male flowers is unique in the genus.

In view of the African material's strong overall affinities with Jablonski's genus, I do not consider the differences great enough to warrant the creation of a new genus. I am therefore including it in *Conceveiba* s.l. If the narrow view of *Conceveiba* were adopted, then a new genus to accommodate the African material would probably be needed. The combination of characters found in the new

species is not seen in any one of the three narrow genera.

Conceveiba africana D. W. Thomas, sp. nov.

TYPE: Gabon. Ogooué–Ivindo Province: Lopé Reserve, 0°30'S, 11°33'E, Chantier SOFOR-GA inventory, tree # 215, in mature forest, 27 Nov. 1986 (fl, fr), J. M. & B. Reitsma 2618 (holotype, MO; isotypes, NY). Figure 1.

Arbores monoeciae ad 19 m altae. *Folia* coriacea dentibus glandulosis praedita morphologia respectu variantia: 1.8 ad 26 cm longa × 1.8 ad 14 cm lata in petiolis ad 10 cm longis; maioria elliptica basi acuta; minoria ovata basi subcordata in petiolis brevibus, glandulis duobus adaxialibus ad juncturam laminae petioloque notata. *Inflorescentiae masculinae* ramiflorae paniculatae ad 21 cm longae, ramis ad 5.5 cm; flores plerumque ternati, cymis contractis. *Flores masculini* calyce glabro quinquelobato fissuris ad dimidium extensis, staminibus filamentis longis glabris rectis vel vix plicatis, antheris quadricellularibus; pistillodium prominens pubescens. *Inflorescentia foeminea* racemo simplici terminale spiciforme notata crasso lignosoque in sicco costato squamis basalibus persistentibus praedita. *Flos foemineus* solitarius bractea lanceolata cum glandulis duabus basalibus subtentus; bracteolae duae saepe sine glandulis; calyx sepalis quinque sepalis liberis lanceolatis, 3–4 mm et stigmatibus tribus crassis rubris praedito, erectis tunc expansis ad 3.5 mm. *Fructus* glabrescentes, 1.1 cm longi, 1.7 cm diam., vix 3-lobati laeves in sicco protruberationibus planis praediti.

Medium-sized, much-branched, monoecious tree to 19 m tall, wood white, slash white and brittle, bark pale gray. Leaves coriaceous, 1.8–26 cm long, 1.8–14 cm wide, glabrous except for domatia, thinly pubescent when young; larger leaves alternate, elliptic, with an acute to obtuse base, the petiole terete, woody, articulated at both ends, to 10 cm long; smallest leaves clustered apically, ovate, with a rounded to subcordate base, the petiole thickened, 0.5–1.5 cm long; leaf margins thickened with glandular teeth; apex of both types acuminate; secondary nerves 5–14 on a side, departing at 45°–60° from the midrib, with a tuft of hairs in the abaxial axil. Male inflorescences yellowish and ramiflorous, from the axils of fallen leaves, forming pyramidal panicles to 21 × 11 cm, the dry rachis slender and ribbed, the lateral branches often with disc-shaped glands at the base. Cymes very contracted, often 3-flowered; first bract narrowly triangular, to 1 mm long, glabrescent; brac-

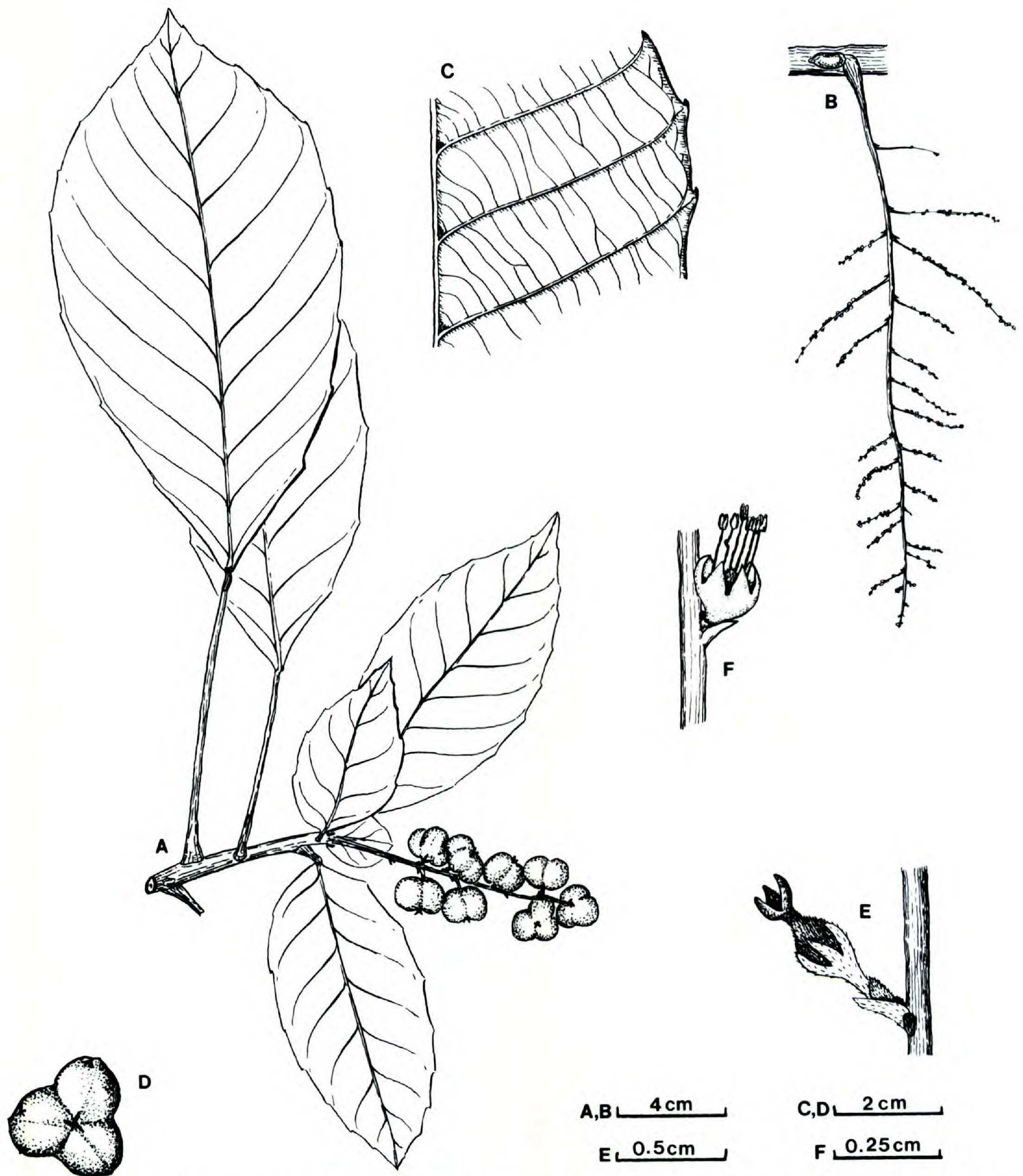


FIGURE 1. A-F. *Conceveiba africana* (Reitsma 2618).—A. Branch, leaves, and infructescence.—B. Male inflorescence.—C. Portion of leaf undersurface.—D. Fruit from above.—E. Female flower.—F. Male flower.

teoles and bracts of lateral flowers smaller and rounded, pubescent with spreading hairs. Flower buds rounded, apiculate, glabrous, 1 mm diam., the calyx valvate, closed. Male flowers apetalous, the calyx lobed to halfway with 5 triangular, acute sepals; stamens all fertile, 7-10 with long glabrous filaments, straight or slightly folded, anthers short, 4-celled, pubescent pistillode present. Female inflorescence a reddish, simple, terminal, spikelike raceme with basal triangular scales, ribbed when

dry, shortly pubescent, 8-9 cm long; bracts 2-3 mm long, acute with 2 basal glands; bracteoles resembling bracts, with or without glands. Female flowers borne singly on short stout pedicels, apetalous, calyx open in bud, sepals 5, acute, 3-4 mm long, sometimes with a basal gland between two of them; ovary densely appressed-pubescent; stigma a stout column to 3 mm long with 3 stout styles to 3.5 mm, erect at first then spreading. Fruit glabrescent, dehiscent, shallowly 3-lobed, 1.1 cm

high, 1.7 cm diam., the surface smooth with occasional flattened protuberances in the dry state, style and sepals persistent, dehiscent, splitting into three 1-seeded portions leaving no column. Seeds about 0.9 cm long, smooth and brown with a conspicuous triangular hilum.

Additional specimen examined. GABON. OGOOUÉ-IVINDO PROVINCE: Lopé Reserve, Chantier LUFTEXFA, 0°30'S, 11°29'E, 30 May 1986 (female fl), *J. M. & B. Reitsma* 2309 NY.

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